

## **CLAIMS:**

1. A method for transferring data between a wide area network and a computer system located on an Ethernet type local area network, comprising:
  - receiving data from the wide area network at a digital device that is connected to both the wide area network and the local area network, the data being destined for a computer system attached to the local area network;
  - receiving a signal indicating that the data is to be transferred to the computer system at a specified bandwidth with guaranteed quality of service;
  - formatting packets that contain the data to indicate that the data is to be transmitted at the requested guaranteed quality of service;
  - sending the packets that contain the data to the computer system, thereby establishing a communication link between the wide area network and the local area network that transmits data at the requested guaranteed quality of service.
2. The method of claim 1, further comprising sending a signal from a network control system server to the digital device, wherein the signal indicates that the data is to be transferred to the computer system at the guaranteed quality of service.
3. The method of claim 1, further comprising:
  - receiving a request for data to be send from a content provider to the computer system; and
  - embedding priority information in the data, wherein the priority information signals that the data is to be delivered to the computer system at the rate higher than the requested guaranteed quality of service.
4. The method of claim 1, further comprising:
  - placing the packets containing the data to be sent to the computer system in a high priority queue; and

transmitting packets in the high priority queue before transmitting packet in corresponding low priority queues.

5. The method of claim 1, wherein the formatting step further comprises inserting priority information into headers associates with the packets, wherein packets having headers with high priority information are transmitted before packets having headers with low priority information.

6. The method of claim 1, wherein receiving a signal indicating that the data is to be transferred at a guaranteed quality of service further comprises receiving a signal indicating that the data is to be transferred to the computer system at a rate higher than a specified minimum rate.

7. A method for transferring data between a wide area network and a computer system located on an Ethernet type local area network, comprising:

receiving data from the wide area network at a digital device that is connected to both the wide area network and the local area network, the data being destined for a computer system attached to the local area network;

receiving a signal indicating that the data is to be transferred to the computer system at a rate higher than the specified minimum rate;

formatting packets that contain the data to indicate that the data is to be transmitted at a rate higher than the minimum rate; and

sending the packets that contain the data to the computer system, thereby establishing a communication link between the wide area network and the local area network that transmits data at the rate higher than the specified minimum rate.

8. A system for transferring data between a wide area network and a computer system located on an Ethernet type local area network, comprising:

a content provider adapted to broadcast data destined for the computer system;  
and

a network control system server adapted to send a guaranteed quality of service signal to a digital device that is attached to the local area network, wherein the digital device is operable in one mode of operation to

- receive data destined for the computer system from the content provider over the wide area network;
- receive the guaranteed quality of service signal from the network control system server, wherein the guaranteed quality of service signal specifies a guaranteed quality of service;
- format the data to indicate that the data is to be transmitted over the local area network at the specified guaranteed quality of service;
- and
- send the data to the computer system, thereby establishing a communication link between the wide area network and the local area network that transmits data at the specified guaranteed quality of service.

9. The system of claim 8, wherein the wide area network is one of a circuit-switched public switched telephone network infrastructure (PSTN).

10. The system of claim 9, wherein the network control system server is adapted to establish a dedicated communication route between the content provider and the digital device through the circuit-switched infrastructure based on a desired guaranteed quality of service over the WAN and the respective IP addresses of the content provider and the computer system.

11. The system of claim 8, wherein the wide area network is one of a circuit-switched or packet-switched public or private network infrastructure.

12. The system of claim 11, wherein the network control system server is adapted to establish a dedicated communication route between the content provider and digital device through the circuit-switched or packet-switched or packet-switched infrastructure

based on a desired guaranteed quality of service over the WAN and the respective IP addresses of the content provider and the computer system.

13. A computer readable program storage device encoded with instructions that, when executed by a computer, transfers data between wide area network and a computer system located on an Ethernet type local area network, comprising:

- receiving data from the wide area network at a digital device that is connected to both the wide area network and the local area network, the data being destined for a computer system attached to the local area network;
- receiving a signal indicating that the data is to be transferred to the computer system at a guaranteed quality of service;
- formatting packets that contain the data to indicate that the data is to be transmitted at the specified guaranteed quality of service; and
- sending the packets that contain the data to the computer system, thereby establishing a communication link between the wide area network and the local area network that transmits data at the specified guaranteed quality of service.

14. A system for transferring data between a wide area network and a computer system located on an Ethernet type local area network, comprising:

- means for receiving data from the wide area network at a digital device that is connected to both the wide area network and the local area network, the data being destined for a computer system attached to the local area network;
- means for receiving a signal indicating that the data is to be transferred to the computer system at a guaranteed quality of service;
- means for formatting packets that contain the data to indicate that the data is to be transmitted at the specified guaranteed quality of service; and
- means for sending the packets that contain the data to the computer system, thereby establishing a communication link between the wide area network

and the local area network that transmits data at the specified guaranteed quality of service.